This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended)   A method of distributing packets among a plurality of processing devices, the method comprising:

receiving a packet;

inputting at least a portion of the packet into a content addressable memory; and

obtaining a result from the content addressable memory (CAM) to indicate ~~a selected processing device to which the received packet is to be sent~~ whether to redirect the received packet to a selected processing device; ~~and~~

redirecting the received packet to the selected processing device when the CAM indicates to redirect the received packet; and

sending the received packet to ~~the indicated processing device~~ a destination indicated by the received packet when the CAM does not indicate to redirect the received packet.

2. (original)   A method as recited in claim 1, wherein the selected device is selected from a plurality of cache systems.

3. (original)   A method as recited in claim 1, wherein the result indicates to redirect the packet from being sent to a destination specified in the received packet.

4. (original)   A method as recited in claim 3, wherein the result includes a processing device identification corresponding to the selected device to which the received packet is to be sent.

5. (original)   A method as recited in claim 1, wherein the content addressable memory is a ternary content addressable memory.

6. (original)   A method as recited in claim 1, wherein the portion(s) of the received packet input into the content addressable memory is selected from a group consisting of a destination address, a destination port, a source address, a source port, and a protocol.

7. (original)   A method as recited in claim 1, wherein the TCAM includes a plurality of entries, and each entry includes a bits-to-match field, an action field, and a redirection destination field.

8. (original)   A method as recited in claim 7, wherein the redirection destination field identifies a cache system.

9. (original)   A method as recited in claim 8, wherein the action field indicates whether the received packet is to be redirected.

10. (original)   A method for facilitating traffic distribution among a plurality of devices, the method comprising generating a plurality of entries within a content addressable memory, each entry including a set of bit values that correspond to at least a portion of a packet and each entry including one or more destination fields indicating where to send a packet that matches the entry's set of bit values and indicating whether to redirect the packet from a destination indicated by the packet.

11. (original)   A method as recited in claim 10, wherein the destination fields include an action field indicating whether to redirect the packet from a destination indicated by the packet itself.

12. (original)   A method as recited in claim 11, wherein the destination fields include a destination identifier indicating a device to which the packet is to be redirected.

13. (original)   A method as recited in claim 10, wherein the set of bits values include at least a 1 or a 0 value and a "don't care" value.

14. (original)   A method as recited in claim 10, wherein the content addressable memory is ternary.

15. (currently amended)   A computer system operable to distribute packets among a plurality of processing devices, comprising:

a first memory;

a content addressable memory; and

a processor coupled to the first memory and the content addressable memory,

wherein at least one of the first memory and the processor are adapted to provide:
receiving a packet;

inputting at least a portion of the packet into the content addressable memory; and

obtaining a result from the content addressable memory (CAM) to indicate a selected processing device to which the received packet is to be sent whether to redirect the received packet to a selected processing device; and

redirecting the received packet to the selected processing device when the CAM indicates to redirect the received packet; and

sending the received packet to ~~the indicated processing device~~ <u>a</u>

<u>destination indicated by the received packet when the CAM does not</u>

<u>indicate to redirect the received packet</u>.

16. (original)   A computer system as recited in claim 15, wherein the selected device is selected from a plurality of cache systems.

17. (original)   A computer system as recited in claim 15, wherein the result indicates to redirect the packet from being sent to a destination specified in the received packet.

18. (original)   A computer system as recited in claim 17, wherein the result includes a processing device identification corresponding to the selected device to which the received packet is to be sent.

19. (original)   A computer system as recited in claim 15, wherein the content addressable memory is a ternary content addressable memory.

20. (original)   A computer system as recited in claim 15, wherein the at least a portion of the received packet is selected from a group consisting of a destination address, a destination port, a source address, a source port, and a protocol.

21. (original)   A computer system as recited in claim 15, wherein the content addressable memory includes a plurality of entries, and each entry includes a bits-to-match field, an action field, and a redirection destination field.

22. (original)   A computer system as recited in claim 21, wherein the redirection destination field identifies a cache system.

23. (original)   A computer system as recited in claim 22, wherein the action field indicates whether the received packet is to be redirected.

24. (currently amended)   A computer system operable to facilitate traffic distribution among a plurality of devices, comprising:

a first memory;

a content addressable memory; and

a processor coupled to the first memory and the content addressable memory,

wherein at least one of the first memory and the processor are adapted to provide generating a plurality of entries within the content addressable memory, each entry including a set of bit values that correspond to at least a portion of a packet and each entry including one or more destination fields indicating where to send a packet that matches the entry's set of bit values and indicating whether to redirect the packet from a destination indicated by the packet.

25. (original) A computer system as recited in claim 24, wherein the destination fields include an action field indicating whether to redirect the packet from a destination indicated by the packet itself.

26. (original) A computer system as recited in claim 25, wherein the destination fields include a destination identifier indicating a device to which the packet is to be redirected.

27. (original) A computer system as recited in claim 24, wherein the set of bits values include at least a 1 or a 0 value and a "don't care" value.

28. (original) A computer system as recited in claim 24, wherein the content addressable memory is ternary.

29. (currently amended)   A computer program product for distributing traffic, the computer program product comprising:

at least one computer readable medium;

computer program instructions stored within the at least one computer readable product configured to cause a processing device to:

receive a packet;

input at least a portion of the packet into a content addressable memory; and

obtain a result from the content addressable memory (CAM) to indicate ~~a selected processing device to which the received packet is to be sent~~ whether to redirect the received packet to a selected processing device; ~~and~~

redirect the received packet to the selected processing device when the CAM indicates to redirect the received packet; and

send the received packet to ~~the indicated processing device~~ a destination indicated by the received packet when the CAM does not indicate to redirect the received packet.

30. (currently amended)   A computer program product for distributing traffic, the computer program product comprising:

at least one computer readable medium;

computer program instructions stored within the at least one computer readable product configured to cause a processing device to generate a plurality of entries within a content addressable memory, each entry including a set of bit values that correspond to at least a portion of a packet and each entry including one or more destination fields indicating where to send a packet that matches the entry's set of bit values and indicating whether to redirect the packet from a destination indicated by the packet.

31. (currently amended)   An apparatus for distributing traffic comprising:

a means for receiving a packet;

a means for inputting at least a portion of the packet into a content addressable memory; and

a means for obtaining a result from the content addressable memory to indicate ~~a selected processing device to which the received packet is to be sent~~ whether to redirect the received packet to a selected processing device or to forward the received packet to a destination specified by the received packet; and

a means for sending the received packet to the indicated processing device.

32. (currently amended)   An apparatus for distributing traffic comprising a means for generating a plurality of entries within a content addressable memory, each entry including a set of bit values that correspond to at least a portion of a packet and each entry including one or more destination fields indicating where to send a packet that matches the entry's set of bit values and indicating whether to redirect the packet from a destination indicated by the packet.

33. (new)   A computer program product as recited in claim 29, wherein the selected device is selected from a plurality of cache systems.

34. (new)   A computer program as recited in claim 29, wherein the result indicates to redirect the packet from being sent to a destination specified in the received packet.

35. (new)   A computer program as recited in claim 34, wherein the result includes a processing device identification corresponding to the selected device to which the received packet is to be sent.

36. (new)   A computer program as recited in claim 29, wherein the content addressable memory is a ternary content addressable memory.

37. (new)   A computer program as recited in claim 29, wherein the portion(s) of the received packet input into the content addressable memory is selected from a group consisting of a destination address, a destination port, a source address, a source port, and a protocol.

38. (new)   A computer program as recited in claim 29, wherein the TCAM includes a plurality of entries, and each entry includes a bits-to-match field, an action field, and a redirection destination field.

39. (new)   A computer program as recited in claim 38, wherein the redirection destination field identifies a cache system.

40. (new)   A computer program as recited in claim 39, wherein the action field indicates whether the received packet is to be redirected.